UNIVERSITY OF LOUISIANA AT LAFAYETTE

STEP COMMITTEE

Technology Fee Application

Laboratory School Teacher Candidate Collaborative
Technology and Network Infrastructure
Title

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Name (Submitter)

College of Education
Organization

Title: Laboratory School Teacher Candidate Collaborative Technology and Network Infrastructure

Date: July 8, 2021

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Abstract
In Fall 2021, an existing building will be turned over to the College of Education to be renovated as a K-12 Laboratory school, called the Learning Lab. The Learning Lab will directly impact 1839 undergraduate, 199 Masters, and 105 doctoral students in the College of Education as they will have field experiences and research opportunities in the 69,000 sq foot facility.

This proposal seeks to (a) fund essential networking infrastructure needed to get the building connected to the UL Lafayette network and (b) provide a set of laptops, multimedia Promethean board for use in the Teacher Candidate Collaborative space to be used by our UL students. This request, partnered with secured external funds of $100K for initial building renovations, will be used to establish a space to support student field experiences, research, and outreach opportunities. This proposal directly addresses the following outcomes for the 2021-2026 STEP Strategic Plan:

SLE 2.1 – Provide sufficient bandwidth to meet the increasing demands of emerging technologies as well as the instructional and research needs of the University.
SLE 3.1 – A number of classrooms will be equipped with interactive multimedia instructional technologies.
SLE 3.2 – Various departments within the University may submit proposals to meet the technology needs of that unit.
SLE 3.3 – Multimedia classrooms require a balance between technology and the learning environment…. adequate seating and fixtures to be able to provide students with an optimal learning environment.
**SLE 5.2** – Improve student success through engagement in high impact practices. These student positions will be career centric and provide students with opportunities to gain "real-life" experience before graduation.

Laboratory School Teacher Candidate Collaborative Technology and Network Infrastructure

A. Purpose of Grant

In Fall 2021, an existing building will be turned over to the College of Education to be renovated as a K-12 Laboratory school, the [Learning Lab]. **This grant will fund essential networking infrastructure needed to get the building connected to the UL Lafayette network** so it can begin serving College of Education students in 2021-2022. It will also **provide laptops and interactive multimedia whiteboards to be used onsite for UL education majors to engage in field experience, research and collaborative projects** on the laboratory school campus in our Teacher Candidate Collaborative spaces within the existing building.

The mission of the UL Lafayette laboratory school, or the Learning Lab, is to advance educational equity, innovation, and opportunity for all of Louisiana. By providing a hub for educational innovation affiliated with one of the largest producers of teachers for the state of Louisiana, the Learning Lab seeks to equip and empower a revitalized pipeline of new teachers and a renewed leadership approach in experienced teachers returning for graduate degrees. Teacher candidates will experience an immersion in leadership and design-based processes for problem solving, a space to explore innovative processes and how they relate to student learning and growth, and a new take on research with a purpose of improving one's practice and the broader field.
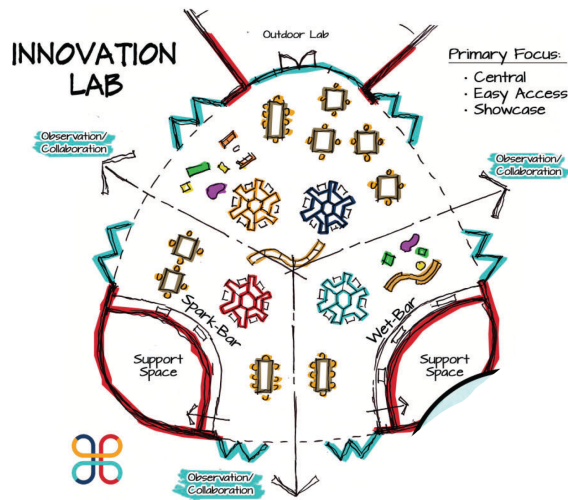
The development of the Learning Lab will have a direct impact on the field-intensive nature of all programs in the College of Education. This comprehensive project will open opportunities for teacher candidates to practice maker-centered pedagogical strategies, collaborative learning, and design thinking with children in our community. It significantly expands student opportunities through deep integration of theory (i.e. coursework) and practice (i.e. field experiences) through clear connections with methods faculty, coursework, and field experiences that will utilize the enhanced spaces.

This proposal meets the following STEP 2021-2026 Strategic plan goals:

STEP Strategic Goal	Grant Elements Aligned to Goals
SLE 2.1 – Provide sufficient bandwidth to meet the increasing demands of emerging technologies as well as the instructional and research needs of the University.	24 SM fiber and pathway connects the new building to the UL Network providing needed bandwidth for emerging technologies to be utilized in the building.

SLE 3.1 – A number of classrooms will be equipped with interactive multimedia instructional technologies. **SLE 3.2** – Various departments within the University may submit proposals to meet the technology needs of that unit.	The ActivPanel® Titanium™ Interactive Displays, AppleTV, and set of laptops provides needed interactive multimedia for effective instruction.
SLE 3.3 – Multimedia classrooms require a balance between technology and the learning environment…. adequate seating and fixtures to be able to provide students with an optimal learning environment.	Collaborative tables and chairs necessary to create an optimal learning environment.
SLE 5.2 – Improve student success through engagement in high impact practices. These student positions will be career centric and provide students with opportunities to gain "real-life" experience before graduation.	The Laboratory school provides opportunities to engage our education majors in high impact practices that provide opportunities to gain "real-life" experience before graduation.

B. Impact on Student Body
This proposal will directly impact all students in the College of Education, 1839 undergraduate, 199 Masters, and 105 doctoral students as they will have field experiences and research opportunities in the 69,000 sq foot facility. With funds from this proposal, we can offer UL students an outdoor wifi connected location right off of a community bike path, UL education majors connectivity and devices during field experience observations in the new laboratory school, and community children opportunities to engage with UL students as mentors facilitating innovative learning experiences in the lab school indoor and outdoor spaces.

C. The Projected Lifetime Of Enhancement
We expect this project to benefit students for at least the next ten years, beginning with 2021 implementation and extending into the life of the brand new UL Lafayette Laboratory school which will offer unique and innovative field experience opportunities for UL students across a variety of majors for decades to come.

C. Person(s) Responsible for Project
- a. Implementation: Kent Young, Director, Networking Services, Douglas Williams, Aimee Barber
- b. Installation: Kent Young, Director, Networking Services
- c. Maintenance: Kent Young, Director, Networking Services
- d. Operation: Kent Young, Director, Networking Services, , Douglas Williams, Aimee Barber
- e. Training: Kent Young, Director, Networking Services, , Douglas Williams, Aimee Barber

E. Qualifications:

Douglas Williams, Ph.D. is a professor of educational technology in the College of Education. Dr. Williams holds bachelors and masters degrees in computer science and a Ph.D. in educational technology from the University of Texas at Austin. He has more than 30 years' experience as a programmer and network administrator. Dr. Williams teaches courses on educational technology and innovation. Dr. Williams is co-chair of the committee developing the Learning Lab.

Aimee Barber, Ed.D., is an assistant professor of educational technology, curriculum, and pedagogy in the College of Education at UL Lafayette. Dr. Barber holds a bachelor's degree in Elementary Education, a master's degree in Education of the Gifted, both from the University of Louisiana at Lafayette, and a doctoral degree in Curriculum, Teaching, and Teacher Education from the University of Florida. She has 15 years of experience designing and implementing curriculum for diverse learners and spent eight of those years also teaching future teachers to see themselves as designers of learning experiences for the diverse students they will soon serve. She teaches educational technology, restorative classroom management, PK-3 math methods, and coaches teacher interns. Her research interests include maker-centered learning, design thinking, and using Practitioner Inquiry to develop innovative and inquiring mindsets in pre-service and in-service teachers to become change agents for education. Dr. Barber is co-chair of the committee developing the Learning Lab.

Budget Category Descriptions

Qty	Item	Description	Cost Each	Total
1	24 SM fiber and pathway	Connects the building to the UL fiber optic cable. **(SLE 2.1)**		$40,000
1	Switches, Wireless Access Points, and Data Drops	4 wireless access points, 20 ethernet drops (4 rooms with 5 drops including drop for AP), and two 48 port Ethernet switches to connect 4 spaces in the building to the UL network. **(SLE 2.1)**		$30,000
2	Promethean AP7-B86-NA-1 86" ActivPanel Titanium, Chromebox, Install	Stand-alone interactive display to support interactive hands-on learning and mirroring from phones, laptops, and tablets. Price includes installation. **(SLE 3.1, 3.2)**	$ 5,386	$ 10,772
5	MacBook Pro 13-inch, 16 GB, 512 GB Storage + AppleCare	Laptops will be used by our education majors in the Teacher Candidate Collaborative space when working on projects and during field experiences with children. **(SLE 3.1, 3.2)**	$1,778	$8,890
2	AppleTV 4k, 36 GB	For screen sharing and multimedia presentations. **(SLE 3.1, 3.2)**	$179	$358
1	Secure Charging Cart for iPads & Laptops	To safely store and charge laptops. **(SLE 3.1, 3.2)**	$1,200	$1,200
12	Collaborative Elemental Activity Table - 30" X 60"	Supports class meetings and collaborations. **(SLE 3.3)**	$360	$4,320
24	Swivel Chairs for Collaboration	Supports class meetings and collaborations. **(SLE 3.3)**	$120	$2,880
		Total Request		**$98,420**

Budget Proposal

Length of Implementation (in years)	1	2	3
1. Equipment	98,420		
2. Software	0		
3. Supplies	0		
4. Maintenance	0		
5. Personnel	0		
6. Others	0		

TOTAL: $98,420

Timeline
Year 1:
Order and install hardware.

Previously Funded STEP Grants
Williams and Barber had 2 STEP proposals funded in Spring 2019, Maker-centered learning lab and Innovation Lab Enhancements

Williams and Barber had a STEP Proposal funded in the Fall 2018 cycle to expand replace aging robotics equipment for use by elementary majors.

Mr. David Lynch and Mrs. Louise Prejean had a STEP proposal funded during 2010 to provide software for the department computer lab.

Dr. Doug Williams, Mrs. Louise Prejean, Dr. Yuxin Ma, and Dr. Mary Jane Ford, had a STEP proposal funded during 2006 to provide software for a pedagogical laboratory for pre-service teachers.

Mrs. Louise Prejean, Dr. Yuxin Ma, Dr. Doug Williams, and Dr. Mary Jane Ford, had a STEP proposal funded during 2006 to provide hardware and software for an educational technology course.

Mrs. Louise Prejean, Dr. Mary Jane Ford, and Dr. Doug Williams had a STEP proposal funded during 2005 to provide software for the student computers in the undergraduate computer lab in the College of Education.

Dr. Sally Dobyns, Dr. Doug Williams, and Mrs. Louise Prejean had a STEP proposal funded during 2005 to provide EduCaching equipment for undergraduate and graduate classes.

Dr. Gail Dack, Dr. Ford, Dr. Doug Williams and Mrs. Louise Prejean had a STEP proposal funded during 2005 to provide video equipment for the student computers in the undergraduate and graduate computer labs in the College of Education.

Mrs. Louise Prejean, Dr. Mary Jane Ford, and Dr. Doug Williams had a STEP proposal funded during 2004 to provide robotics software and hardware for the student computers in the undergraduate computer lab in the College of Education.

Dr. Doug Williams, Mrs. Louise Prejean, and Dr. Mary Jane Ford, had a STEP proposal funded during 2004 to upgrade software in the undergraduate computer lab in the College of Education.

Dr. Mary Jane Ford, Dr. Doug Williams, and Dr. Susan Lyman had a STEP proposal funded during 2000 to upgrade the student computers in the undergraduate computer lab in the College of Education. The server was not upgraded as part of this grant.

Dr. Doug Williams, Dr. Mary Jane Ford, and Dr. Susan Lyman had a STEP proposal funded during the 2000-2001 funding cycle to install equipment and software in the College of Education Materials Center.